

25X1 TOP SECRET CHESS RUFF PHOTOGRAPHIC INTERPRETATION REPORT TALLINN AMM/SAM LAUNCH COMPLEX, USSR, CHANGES AND ADDITIONS, APRIL 1965 NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER 25X1 TOP SECRET CHESS RUFF

This report was prepared in partial response to a CIA/ORR requirement for an updating of information concerning the AMM/SAM launch complexes under construction near Tallinn and Cherepovets, USSR. The Tallinn complex as observed on KEYHOLE photography is included

herein. Information pertaining to the Cherepovets complex will be the subject of a separate NPIC report.

The Tallinn AMM/SAM Launch Complex is under construction at 59-24-25N 24-19-30E, 13 nautical miles (nm) west-southwest of Tallinn (Figure 1). Its history and status of construction as revealed by KEYHOLE photography were reported in a previous NPIC publication. 1/

Briefly, photography first revealed the Tallinn AMM/SAM Launch Complex under construction. There was no evidence of construction associated with the complex when the area was observed on photography

It is being constructed on the

site of former Vaana Airfield.

The complex was observed on very good

quality, stereo, KH-7 photography
(Figures 3, 5, 6, 7, 8, 9, 10, 11). This was
the first snow-free coverage since August 1964
and provides the best basis for an assessment
of changes and additions since that date.

Considered chronologically, subsequent to August 1964, the Tallinn complex was next observed on good-quality, nonstereo KH-7 photography (Figure 4) with snow cover limiting interpretation. Significant changes and/or additions since August 1964 as observed on the photography include narrow V patterns in 5 of the 6 launch positions of Launch Site A and within each launch position within Site B; a van or structure occupying a new revetted position in the guidance/control areas of Sites A, B, and C; con-

struction of additional revetment walls at several launch positions; expansion of the road system and construction of revetted areas in the area west of the main road serving the Launch Area. A new revetted area was also constructed east of the Launch Area main road near its intersection with the access road to Site C. New



FIGURE 1. LOCATION OF TALLINN AMM/SAM LAUNCH COM-PLEX.

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FIGURE 2. TALLINN AMM/SAM LAUNCH COMPLEX,

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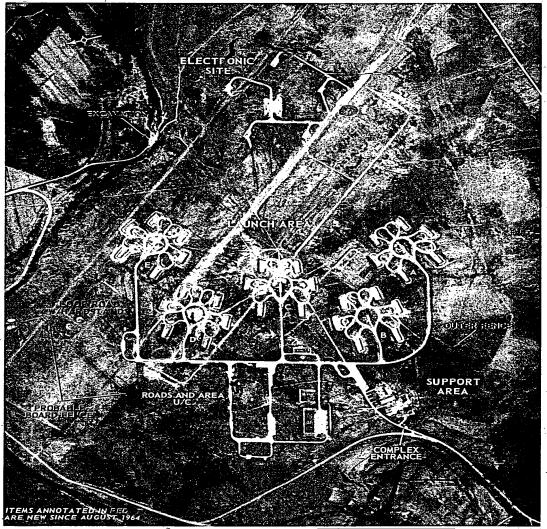


FIGURE 3. TALLINN AMM/SAM LAUNCH COMPLEX,

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FIGURE 5. LAUNCH SITE A.

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FIGURE 6. LAUNCH SITE B.

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TOP SECRET CHESS RUFF

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FIGURE 7. LAUNCH SITE C.

7 -

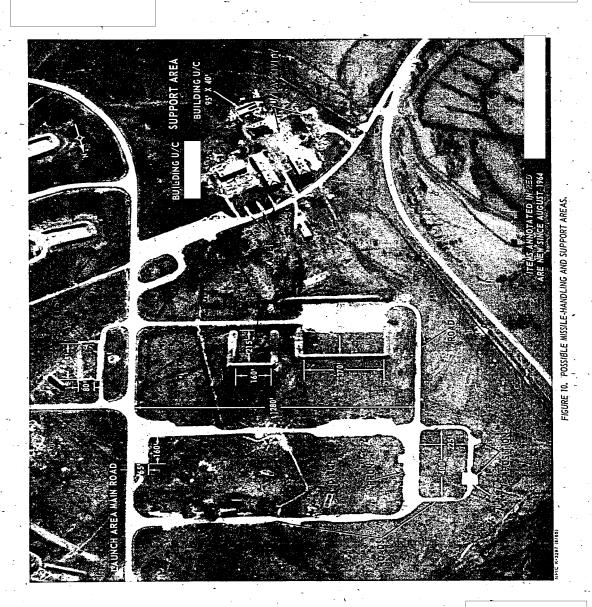
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FIGURE 8. LAUNCH SITE D.

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- 10--

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aprons were constructed along the main road and a new loop road with aprons was constructed on the northern side of the access road to Launch Site E. A new section of probable board fence, constructed since August 1964, extends along the northwest boundary of the complex. Two new buildings were observed under construction in the Support Area near

the complex entrance. Some of the material used for construction of the revetment walls at the centrally located position within the Electronic Site was removed between August 1964 and March 1965.

The Tallinn complex was next observed on smaller scale, stereo KEYHOLE photography (not shown graphically).

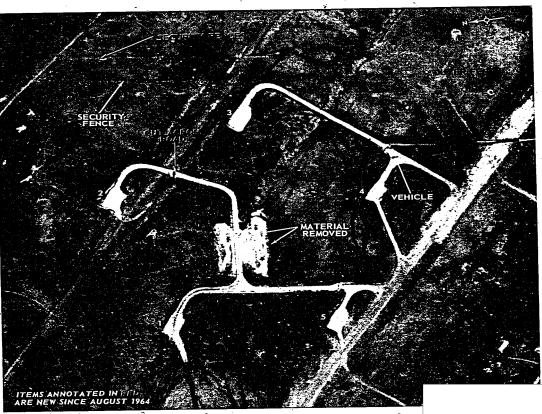


FIGURE 11. ELECTRONIC SITE.

·- 11 -

## TOP SECRET CHESS RUFF

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No significant changes were discernible because of melting snow conditions and small photographic scale.

The majority of graphics included in this report were selected from the snow-free, large-scale photography Many of the features shown as new on these graphics were present in March 1965 (Figure 4) but none so annotated were present in August 1964. In some instances snow cover may have concealed some of the features in March 1965.

The V patterns evident within the launch positions of Site C were not discernible on the March photography and probably indicate construction progress. The 2 buildings under construction in the Support Area were in an earlier stage of construction in March. Additional material was removed from the central area of the Electronic Site between March and April 1965.

The V patterns within some of the launch positions have a rail-like appearance (Table 1). Each side of the V appears as a double-track configuration that converges before reaching the launch point. Point of convergence cannot be determined on current photography. Each of the launch points appears as an ex-

cavation, in most cases square. Depths of these excavations cannot be determined.

Particularly noticeable at Launch Positions C-1, C-2, C-5, and C-6, an area extending approximately 40 feet from the launch points toward the opposite end of the revetted positions appears to be undergoing special preparation.

A 90-foot strip has been newly surfaced along the approach roads at the entrance to each of the launch positions of Launch Site B. Preparation for similar surfacing is underway at 2 of the positions of Site A.

Revetment walls have been constructed at the ends of some of the launch positions since August 1964 (Table 1). A curved revetment wall is now located opposite the opening of each launch position. Several of these were under construction and others had not been started in August 1964.

There are now 3 security fences either under construction or possibly completed along the eastern boundary of the complex where 1 fence existed in August 1964. An outer security fence has been added along the southern boundary since that date.

Table 1 follows:

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- 12 -

TOP SECRET CHESS RUFF

		Launch Complex, April 1965	

Launch Positions	Launch Point Area	Launch Pad Area	Revetment Wall Surfacings	Approach Road to Launch Position	Remarks
Launch Site A	<u></u>			·	
	Probable concrete along 1 side*	Rail bed preparation appears incomplete	Probably complete	Not surfaced	Blocks of white-toned material in vicinity of launch point
Launch Position 2	Ballast surrounds launch point	Rails probably installed; piles of material	Complete	Appears graded	
Launch Position 3	Ballast not applied	Rails probably installed; piles of material	Complete	Surfacing underway*	Piles of material on approach road
Launch Position 4	Status undetermined	Pad surface is smooth*	Nearly complete	Not surfaced	Moving vehicle within position; piles of material
					along edges
Launch Position 5	Ballast surrounds launch point	Rails probably installed; material piled alongside		Not surfaced	
Launch Position 6	Ballast probably not applied	Rails possibly installed; material alongside	Nearly complete	Not surfaced	
Launch Site B	•		* *		
Launch Position 1	Ballast surrounds launch point*	Rails probably installed; material alongside	Complete	Surfaced	Vehicle/equipment near launch point; construction of end wall newly completed
Launch Position 2	Ballast surrounds launch point	Rails probably installed	Probably complete	Surfaced *	
Launch Position 3	Ballast surrounds launch point	Rails probably installed; material alongside	Probably complete	Surfaced	
Launch Position 4	Ballast surrounds launch point	Rails probably installed	Probably complete	Surfaced	
*Launch Position 5	Ballast surrounds launch point*	Rails probably installed	Appear incomplete	Surfaced	Probable crane beside launch point
Launch Position 6	Ballast surrounds launch point	Rails probably installed	Appear incomplete	Surfaced	
Launch Site C				•	
Launch Position 1	Ballast along 1 side of launch, point	Rail bed u/c; materials alongside	Probably complete*	Not surfaced	End revetment wall newly constructed
Launch Position 2	Piles of material around launch point*	Rail bed u/c; materials alongside	Complete	Not surfaced	Ditch extends from launch point across road
Launch Position 3	Piles of material around launch point	Rail bed u/c; materials alongside	Complete	Not surfaced	Ditch extends from launch point across road
Launch Position 4	Piles of material around launch point	V-pattern for rail beds not apparent*	Incomplete	Not surfaced	Ditch extends from launch point across road; piles of material on pad surface
Launch Position 5	Piles of material around launch point	Rail bed u/c; materials alongside	Incomplete	Not surfaced	
Launch Position 6	Piles of material around launch	Rail bed u/c	Complete	Not surfaced	ı.

\_ 13 \_

# TOP SECRET CHESS RUFF

		Table	1. (Continued)		
Launch Positions	Launch Point Area	Launch Pad Area	Revetment Wall Surfacings	Approach Road to Launch Position	Remarks
Launch Site D  Launch Position 1  Launch Position 2  Launch Position 3  Launch Position 4  Launch Position 5  Launch Position 6	Square rim, slightly above pad level Square excavation Square excavation Square excavation Square excavation Square excavation	Surface appears smooth  Material for wall sur- facing along edge  Appears smooth  Appears smooth  Appears smooth  Appears smooth	Incomplete	Not surfaced Not surfaced Not surfaced Not surfaced Not surfaced Not surfaced	End revetment wall newly constructed
Launch Site E Launch Position 1	Square excavation	Material for wall sur- facing along edge	Early stage*	Not surfaced	End revetment wall newly constructed
Launch Position 2	Square excavation	Material for wall sur- facing along edge	Incomplete	Not surfaced	
Launch Position 3	Square excavation	Material for wall sur- facing along edge	Incomplete	Not surfaced	4
Launch Position	Area disrupted around launch point	Appears smooth	Incomplete	Not surfaced	. 0
	Square excavation Square excavation		Incomplete Incomplete*	Not surfaced Not surfaced	End revetment wall newly constructed

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- 14 -

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